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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,584	12/02/2004	Dierk Schmidt	3140	9940
7590	10/04/2006		EXAMINER	
Striker Striker & Stenby 103 East Neck Road Huntington, NY 11743		PUNNOOSE, ROY M		
		ART UNIT		PAPER NUMBER
		2877		

DATE MAILED: 10/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/516,584	SCHMIDT ET AL.
Examiner	Art Unit	
Roy M. Punnoose	2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### **Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 05 June 2006.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 1-5 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-5 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 02 December 2004 is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 06/2006 AND 12/2004.  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_ .  
5)  Notice of Informal Patent Application  
6)  Other: \_\_\_\_ .

## **DETAILED ACTION**

### *Specification*

1. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

#### *Arrangement of the Specification*

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading.

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS (if applicable).
- (c) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (d) BRIEF SUMMARY OF THE INVENTION.
- (e) BRIEF DESCRIPTION OF THE DRAWING(S).
- (f) DETAILED DESCRIPTION OF THE INVENTION.
- (g) CLAIM OR CLAIMS (commencing on a separate sheet).
- (h) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet and not more than 150 words).

2. In the instant application, several section headings are missing. Appropriate correction is required.

3. The disclosure is objected to because the "Background of the Invention" is referenced to claim 1. This is improper. The "Background of the Invention" should contain a statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention.

See MPEP § 608.01(c). Appropriate correction is required.

#### *Claim Rejections - 35 USC § 112*

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
6. Claims 1-4 are rejected because it simply consists of a list of components that allegedly make a distance-measuring device. They do not provide any information on the relationship between the components, or, how these components are structured together to make the claimed device. Further, the claims create doubts as to whether this is a working distance measuring device because it does not consist of any light producing means, such as a laser diode, or any light receiving means, such as a photodiode. It appears to consist of only oscillators, VCO, PLL and LC filter circuits. The above stated facts have made the claims vague and indefinite. Appropriate correction is required.

7. Claim 5 does not have any substance or structure present in it. It merely points to claim 5.

#### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
9. Claim 1-3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over de Gouy et al (US\_6,384,770 B1).
10. Claim 1 is rejected because:

A. de Gouy et al (de Gouy hereinafter) teaches of a devise comprising, at least one oscillator 46 (see Figure 11) which produces a basic signal and a first circuit device 40 which produces a first signal at a first frequency which is higher than that of the basic frequency, whereby the first circuit device 40 comprises at least one PLL circuit 400 and a VCO circuit 43 (see col.8, lines 13-32) for measuring distance between two points.

B. However, de Gouy does not teach that said distance-measuring device is a laser device for measuring distance between two points.

C. In view of de Gouy's teaching of a distance measuring device that uses radio frequency segment of the electromagnetic radiation spectrum, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the radio frequency segment with a another electromagnetic radiation segment such as that of the laser due to the fact that laser is significantly more immune from external noises and thus would provide a more accurate distance measurements.

11. Claim 2 is rejected for the same reasons of rejection of claim 1 above and additionally because in view of de Gouy's teaching of using filters in the circuit, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate any type of filter into the circuit to obtain a desired result.

12. Claim 3 is rejected for the same reasons of rejection of claim 1 above and additionally because in view of de Gouy's teaching of using divider 45 in the circuit, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a divider into the PLL circuit to obtain a desired result.

13. Claim 5 is rejected because it does not have any substance or structure present in it. It merely points to claim 5.

***Allowable Subject Matter***

14. Claim 4 has allowable subject matter and would be allowable if the 35 USC 112 rejections detailed above can be overcome and rewritten in independent form to include all of the limitations of the base claim and any intervening claims.

15. With regard to claim 4, prior art of record, taken alone or in combination, fails to disclose or render a phase-shifting element which produces a second signal out of the basic signal at a second frequency which differs from the fundamental frequency by transferring an input signal between discrete phase positions, whereby a second circuit device is located downstream from a PLL circuit, in combination with the rest of the limitations of claim 4 and its parent claim.

***Conclusion/Status Information***

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Roy M. Punnoose** whose telephone number is **571-272-2427**. The examiner can normally be reached on 9:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Gregory J. Toatley, Jr.** can be reached on **571-272-2800 ext.77**. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 29, 2006



Roy M. Punnoose  
Patent Examiner  
Art Unit 2877